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## REMARKS

## Status of the Claims

Pending claims

Claims 1-92 as filed are pending.

Claim amendments in the instant amendment

Claims 1-41 and 56-92 are cancelled; and claims 93-94 are added. Thus, after entry of the instant amendment, claims 42-55 and 93-94 will be pending and under consideration.

## The Restriction Requirement

The Patent Office has alleged that the pending claims of the application are directed to ninety separate and distinct inventions under 35 U.S.C. §121:

The instant application has been restricted to one of the following inventions under 35 U.S.C. §121:

Group I: Claims 1-23, 40-41, 67-85 drawn to DNA, vectors, hosts cells, probes and expression of transaminase, classified in class 435, subclass 193.

Group II: Claims 24-35, 64, 86-87 drawn to transaminases, classified in class 435, subclass 193.

Group III: Claims 36-39, drawn to transaminase antibodies, classified in class 530, subclass 387.9.

Group IV: Claims 42-55, drawn to methods of generating a variant polynucleotide, classified in class 435, subclass 440.

Group V: Claims 56-60, drawn to a computer and computer readable medium, classified in class 712, subclass 1.

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Group VI: Claims 61-63, drawn to methods of computer analysis of polynucleotide sequences, classified in class 700, subclass 90.

Group VII: Claim 65, drawn to a method of using a transaminase, classified in class 435, subclass 168.

Group VIII: Claim 66, drawn to methods of identifying variant polypeptides, classified in class 435, subclass 27.

Group IX: Claims 88-92, drawn to a method of modifying small molecules, classified in class 435, subclass 41.

In addition, the Examiner further alleges that for each of inventions I-IX, restriction to one of the following sequences is also required under 35 U.S.C. §121, inventions (A)-(J), SEQ. ID NOS: 17-24, 35 and 39, a sequence encoding thereof, or an antibody against it and methods of making and using thereof.

## The Election

In response to the Restriction Requirement, Applicants elect Group IV, nucleotides group G, claims 42-55, drawn to methods of generating variants of SEQ ID NO:23, with traverse.

Applicants respectfully submit that the Patent Office should reconsider and allow the rejoinder of nucleotide groups A, B, C, D, F, and J, all transaminases originally derived from the organism Aquifex.

Applicants note MPEP 803.04 Restriction - Nucleotide Sequences, which states in part,

Nucleotide sequences encoding different proteins are structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normally constitute independent and distinct inventions within the meaning of 35 U.S.C. 121. Absent evidence to the contrary, each such nucleotide sequence is presumed to represent an independent and distinct invention, subject to a restriction requirement pursuant to 35 U.S.C. 121 and 37 CFR 1.141 et seq. Nevertheless, to further aid the biotechnology industry in protecting its intellectual property without creating an undue burden on the Office, the Commissioner has decided sua sponte to partially waive the requirements of 37CFR 1.141 et seq. and permit a reasonable number of such nucleotide sequences

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to be claimed in a single application. See Examination of Patent Applications Containing Nucleotide Sequences, 1192 O.G. 68 (November 19, 1996). (Emphasis added.)

The Patent Office further states in the same section that:

It has been determined that normally ten sequences constitute a reasonable number for examination purposes. Accordingly, in most cases, up to ten independent and distinct nucleotide sequences will be examined in a single application without restriction. In addition to the specifically selected sequences, those sequences that are patentably indistinct from the selected sequences will also be examined. Furthermore, nucleotide sequences encoding the same protein are not considered to be independent and distinct inventions and will continue to be examined together.

For these reasons, Applicants respectfully request that SEQ ID NOS:17, 18, 19, 20, 22, and 39 be examined with SEQ ID NO:23. The sequences requested to be examined are less in number than the 10 individual independent and distinct nucleotide sequences the Patent Office has determined to be a reasonable number to be examined in a single application. Applicants note that in addition to SEQ ID NOS:17, 18, 19, 20, 22, 23, and 39, *i.e.*, the specifically selected sequences, sequences which are patentably indistinct and those that encode the same protein will be examined as well.

It is noted that while each sequence is searched by the Patent Office, each variant of the sequence is not searched. Accordingly, in keeping with the policy objectives of the Patent Office to aid the biotechnology industry in protecting its intellectual property without creating an undue burden on the Office, Applicants respectfully request the examination of SEQ ID NOS:17, 18, 19, 20, 23, and 39 in the instant application.

Applicants believe that no fee is required for submission of this Response. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 06-1050. Please credit any overpayment to the above-noted Deposit Account.

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If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 858 678 5070.

Respectfully submitted,

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3/25/2003

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